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10/726,879	12/03/2003	Daniel J. Rogers	M61.12-0538	5357
27366	7590	07/02/2007		
WESTMAN CHAMPLIN (MICROSOFT CORPORATION)			EXAMINER	
SUITE 1400			TRUONG, LECHI	
900 SECOND AVENUE SOUTH				
MINNEAPOLIS, MN 55402-3319				
			ART UNIT	PAPER NUMBER
			2194	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/726,879

Applicant(s)

ROGERS, DANIEL J.

Examiner

LeChi Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/22/06, 12/09/05, 05/20/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-24 are presented for the examination.

#### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 14-22 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.
3. Claim 14 is non-statutory because it is software per se embodied in a manner so as to be executable as the only hardware is in an intended use statement.

Claim 52 defines "System" in the preamble and the body of the claim recites "a software bus", "a first business software component", "a second business software component". a software bus, a first business software component, a second business software component appear to be software modules. Therefore, claim 52 is non-statutory because it recites a system claim that comprises software per se embodiments.

4. Claim 23 is rejected as non-statutory because it is not tangibly embodied.

Claim 23 defines a computer readable medium in the preamble. However, the specification discloses this medium to be a computer data signal embodied in a carrier wave. Carrier waves are not the tangible medium; therefore, claim 23 is non-statutory.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-5, 10-16, 18-21, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonera (Web Services White paper) in view of Flurry (US. Patent 7, 188155).

As to claim 1, Sonera teaches the invention substantially as claimed including: a first business software component (a service provider, sec: 2, ln 6-7), discovering (discovers, sec: 2, ln 8-9), discovering information about a first business software component (sec: 2, ln 8-16/ sec: 6, ln 1-8), the first/second component capability or first/second component requirement (the necessary information for invoking the provided services, sec: 6, ln 4-5/ the services located (binding Template) and reference to information on how they can be invoked, sec: 6.2, ln 16-18), the first business software component having at least one first component capability or first component requirement( sec:6, ln 4-5), binding( binding, sec: 5, ln 14/ ln 17-20/ ln 28-31), a first/ second role in a model driven bus( a particular port type/ port type is an abstract set of operations [role]supported by one or more endpoints, sec: 5, ln 12-16), binding the at least one first/second component capability or first component requirement to a first/second role in a model-driven bus( sec: 7, ln 9-16).

Sonera do not explicitly teach plurality business software components discovering information about a second business software component. However, Flurry teaches plurality business software components, discovering information about a second business software components (Target services 560[business software components] are accessed through the on-ramp device 550 which is used to perform discovery and selection of target service implementations based on WSDL service definitions defined by the off-ramp configuration file 542, col 10, ln 14-18/ Fig. 5).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Sonera to incorporate the feature of plurality business software components discovering information about a second business software component because this allows interoperability between systems and applications by using Web services which are built using standard technologies.

**As to claim 2**, Sonera teaches discovering information about the first business component is performed by a discovery manager (sec: 2, ln ln 8-9).

**As to claim 3**, Sonera teaches discovering information about the second business component is performed by a discovery manager (sec: 2, ln 8-9).

**As to claim 4**, Sonera teaches discovering information about the first business component occurs automatically (sec: 7, ln 13-16).

**As to claim 5**, Sonera teaches discovering information about the second business component occurs automatically (sec: 7, ln 13-16/ sec: 5, ln 11).

**As to claim 10**, Sonera teaches providing standardized messaging between the first and second business software components (sec: 4, ln 11-13).

**As to claim 11**, Flurry teaches examining role bindings to determine if a business process can be enabled (col 7, ln 37-42).

**As to claim 12**, Flurry teaches examining includes comparing process role bindings to predefined process pattern information (col 9, ln 4-16).

**As to claim 13**, Flurry teaches the predefined process pattern information is part of a pattern fitness layer (col 10, ln 5-15/ Fig. 5).

**As to claim 14**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Furry teaches a software bus having a temporally stable interface designed in accordance with a comprehensive business taxonomy (col 10, ln 10-19/ 29-37), a first business software component (client 510, col 10, 5-10), a second business software component (Target services, col 10, ln 14-18), a first portion (a web service operation, col 10, ln 5-10 and ln 30-37), a second portion (target device implementation, col 10, ln 15-18).

**As to claim 15**, Flurry teaches the software bus includes a message routing layer for communication with each of the software components (col 5, ln 5-10/ Fig. 5).

**As to claim 16**, Flurry teaches includes a pattern fitness layer to check information relative to the first and second software components (col 10, ln 5-20/ Fig. 5).

**As to claims 18-21**, Flurry teaches the software bus includes a replication layer, the software bus includes an auditing layer, the software bus includes a key performance indicators layer, the software bus is usable with different comprehensive business taxonomies (col 5, ln 5-25/ Fig. 5).

**As to claim 23**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reasons as claim 1 above. In additional, Flurry teaches software component side custom-

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configured (the client device 510, col 10, ln 15-50), a specific business software component (a server side of the system, col 10, ln 5-15); and a standardized side (one-ramp device 520/ off-ramp 540, col 10, ln 5-15), durable application programming interface (the application programming interface 521, col 10, ln 19-25/ Fig. 5), wherein the standardized side includes data relative to at least one business process that is not supported by the software component( col 11, ln 15-23).

**As to claim 24**, it is an apparatus claim of claim 23; therefore, it is rejected for the same reason a claim 23 above. In additional, Flurry teaches metadata (WSDL, col 2, ln 5-5), describing capabilities of the stand-alone business software component with metadata; describing requirements of the stand-alone business software component with metadata (col 2, ln 5-15)

6. Claims **6-8, 17, 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonera (Web Services White paper) in view of Flurry (US. Patent 7, 188155), as applied to claim 1 above, and further in view of O'Konski et al (US. Patent 6, 996500).

**As to claim 6**, Sonera and Flurry do not teach installation of the first business software component. However, O'Konski teaches installation of the first business software component (a diagnostic application is installed as a Web Service upon a server, col 3, ln 64-67/ a computer operating system or other diagnostic software installed upon SOAP server 310/ col 5, ln 5-7).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Sonera and Flurry to incorporate the feature installation of the first business software component because this provides the limitations that relied upon platform specific solutions.

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**As to claims 7, 8,** O’Konski teaches metadata (col 4, ln 5-9).

**As to claim 17,** O’Konski teaches the software bus includes an administration layer to facilitate user management of the components (col 5, ln 25-30).

**As to claim 22,** O’Konski teaches domain-specific( col 4, ln 15-20).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sonera (Web Services White paper) in view of Flurry (US. Patent 7, 188155), as applied to claim 1 above, and further in view of Scardamalia et al (US. Patent 6295571 B1).

**As to claim 9,** Sonnera and Flurry do not teach least one capability of the first business software component overlaps at least one capability of the second business software component, and wherein the model-driven bus provides arbitration such that only one of the first and second business software components provides the overlapping function. However, Scardamalia teaches one capability of the first business software component overlaps at least one capability of the second business software component (overlapping read and write operations will only interfere with one another when two such operation attempt to access the same memory bank at the same time, col 13, ln 40 –45), wherein the model-driven bus provides arbitration such that only one of the first and second business software components provides the overlapping function (Although any suitable arbitration scheme may be used for such collisions, care is taken to avoid any priority-type arbitration method from resulting in locking out one or more computer systems from accessing shared memory for a prolonged period of time, col 13, ln 40 –49).



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It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Sonera and Flurry to incorporate the feature of overlaps at least one capability and arbitration because this eliminates the requirement to pass messages between processors and significantly reduces the data transfer times.

### *Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

June 21, 2007

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER